Environmental Context of Forestry, Salmon, and CZARA in Oregon

- Oregon's forestry program has not addressed key significant deficiencies over the last 15 years. According to state and federal studies, the problems 1) have caused and continue to cause temperature and sediment impairments and 2) continue to threaten ESA-listed coastal coho.
- There are over 6800 river miles in Oregon's coastal zone area impaired for temperature and sediment. Forestry makes up ~80% of the stream network in western Oregon and is a major contributor to temperature and sediment problems.
- The data from the ODF/DEQ 2002 sufficiency analysis and ODF's Ripstream studies (2002 – 2010) indicate that Oregon's forest practice rules contribute to water quality impairments. The 1995 Tri-State Botkin Report, the 1999 Oregon-Commissioned Independent Multidisciplinary Science Team, and NOAA's Coastal Coho Listing (2008) concluded that current Oregon FPA practices will not restore listed coastal coho populations. Insufficient riparian buffers, roads, and landslides in forestry are primary factors harming salmon.
- Washington and California have adopted forestry rules that address these problems; Oregon has made some progress since 1998 by adopting rules to reduce/eliminate landslides to protect public safety and adopted rules that apply to currently used roads. However, they have not gone as far as Washington and California to adopt forestry rules that adequately protect for water quality and fish.

Comparing Oregon, Washington and California General Forest Practices

Table 1. General Forestry Practices on State and Private Lands in Oregon, Washington, and California

	Oregon	**Washington**	**California**
Riparian Buffers			
Small and Medium Fish-Bearing	Riparian management zone of 20' to 70'; 20-foot no cut; regulatory	Riparian management zone of 90' – 200'. 50-foot minimum no cut; regulatory	50-150 foot management area; regulatory
Non-Fish Bearing("Type N")	None	50-foot no cut; regulatory	Variable buffer width determined by consulting forester; regulatory
Herbicide Spray Buffers Non-Fish Bearing ("Type N")			
Non-Fish Bearing ("Type N")	None	50-foot, no spray; regulatory	Variable buffer width by consulting forester for riparian buffer; regulatory
Roads Management			
Road Types	New, Existing, regulatory; voluntary program for legacy roads, no publicly available inventory of extent of problem, no effectiveness monitoring and	New, Existing, Legacy; regulatory	New, Existing, Legacy; regulatory

	tracking of program		
Landslides and Water Quality			
Resources Protected	Public safety; regulatory	Public safety, land and water resources; regulatory	Public safety, Land and water resources; regulatory

Additional Progress Needed

- **General CZARA Guidelines for Approval**: Two ways for states to have an approvable program: 1) *regulatory program*; **OR** 2) *voluntary approach* with program description, monitoring, tracking, and an enforceable authority to back up program. If the State chooses to pursue a voluntary approach, the State needs to identify state enforcement authorities that can be used to prevent nonpoint pollution and expressly commit to use those authorities if voluntary measures are not complied with or where necessary. The State needs to describe the mechanism or process that links the implementing agency with the enforcement agency.

Reasonable Options for Oregon to Get to an Approvable CZARA Program

- **Riparian Buffers**
  - **Medium and Small-Fish Bearing Streams: regulatory program**
    - *Deficiencies: Small no-cut buffer for small and medium fish-bearing streams. Creates temperature, erosion and sediment problems.*
    - *Examples of State Actions Needed: 1) Complete riparian rule by end of 2015 or mid-2016; 2) Rule should cover a broad range of medium and small-fish bearing streams; and 3) At least a 50' no cut with a wider riparian management zone (as frame of reference, NMFS is seeking 150' no cut buffers for fish and non-fish perennial streams and 50' no cut buffers for intermittent streams in the BLM Western Oregon Plan Revision).*
  - **Small, Non-fish bearing streams: voluntary approach**
    - *Deficiencies: No buffers for non-fish bearing streams. Creates temperature, erosion and sediment problems for salmon spawning areas and downstream habitat.*
    - *Examples of State Actions Needed: 1) At least 50'~~-100'~~ no cut buffers (as frame of reference, NMFS is seeking 150' no cut buffers for fish and non-fish perennial streams and 50' no cut buffers for intermittent streams in the BLM Western Oregon Plan Revision); 2) Monitoring, tracking, and reporting similar to other ODF programs for other tree harvests; and 3) Explore ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented.*
- **Roads: voluntary approach**
  - *Deficiencies: Does not include legacy roads. Voluntary program doesn't include monitoring and tracking.*
  - *Examples of State Actions Needed: 1) Use voluntary approach to include legacy roads in road inventory; 2) Develop identification approach for universe of roads, including legacy*

roads having potential to deliver sediment to streams, 3) Develop ranking and inventory system, 4) Conduct evaluation, problem identification process and schedule for repairing problem roads, 5) Monitor and track voluntary measures. Examples could include those similar to WA's and ID's; 6) Identify ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented. **(For effective voluntary approach, ~~expect~~ 1-6 are needed as a package. All voluntary approaches need monitoring, tracking and identification of enforcement authorities that can be used if voluntary approach fails to achieve the desired results.)**

- **Landslides: voluntary approach**
  - *Examples of State Actions Needed: 1) Measures to protect landslide areas (numerous examples in attachment); 2) Voluntary programs to encourage forestry BMPs to protect high-risk landslide areas and ensure that roads are designed to minimize slope failure risk; 3) Monitor and track voluntary measures. Examples could include those similar to WA's and ID's; 4) Identify ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented.* **(All voluntary approaches need monitoring, tracking and identification of enforcement authorities that can be used if voluntary approach fails to achieve the desired results.)**
- **Spray Buffers for Aerial Application of Herbicides on Non-Fish Bearing Streams: voluntary approach**
  - *Deficiencies: No spray buffer*
  - *Examples of State Actions Needed: 1) Adequate riparian protections for non-fish bearing streams may also be sufficient for herbicide spray buffers; OR 1) Revise ODF Notification of Operation form to add a check box for aerial applicators to adhere to FIFRA labels for all stream types; 2) Guidelines for voluntary buffer protections for aerial application of herbicides on non-fish bearing streams; 3) Monitor and track voluntary measures using existing pesticide regulations; 4) Explore ODF and DEQ general authorities for enforcing changes in critical areas when voluntary measures are not implemented.*

Note: EPA and NOAA are still evaluating Oregon's agricultural program in the context of CZARA and public comments. Concerns include lack of specificity in Ag Water Quality Management Action Plan rules, no formal monitoring and tracking, and limited enforcement.